WHAT IS CLAIMED IS:

1. A process for removing contaminants from the products of a Fischer-Tropsch synthesis reaction, said contaminants comprising (i) particulates having an effective diameter of greater than 1 micron and (ii) at least 5 ppm of aluminum in aluminum-containing contaminants having an effective diameter of less than 1 micron, said process comprising the steps of:

(a) passing the products of the Fischer-Tropsch synthesis reaction through a first particulate removal zone capable of removing particulates having an effective diameter of greater than 1 micron;

(b) collecting from the first particulate removal zone a substantially particulate free Fischer-Tropsch feed stream containing 5 ppm or more of aluminum in aluminum containing-contaminants having an effective diameter of less than about 1 micron;

(c) contacting the substantially particulate free Fischer-Tropsch feed stream in up-flow mode with an aluminum active catalyst in a guard-bed under aluminum activating conditions, whereby a feed stream mixture is formed which comprises aluminum-containing particles having an effective diameter of more than 1 micron in a Fischer-Tropsch hydrocarbon continuous phase;

(d) passing the feed stream mixture through a second particulate removal zone capable of removing substantially all of the aluminum-containing particles formed in step (c); and

(e) recovering from the second particulate removal zone a Fischer-Tropsch product containing less than about 5 ppm total aluminum.

2. The process of claim 1 wherein the aluminum active catalyst comprises at least one active Group VI metal and at least one active Group VIII base metal on an oxide matrix.

3. The process of claim 2 wherein the Group VI metal is selected from the group consisting of chromium, molybdenum, and tungsten.

4. The process of claim 2 wherein the Group VI base metal is selected from the group consisting of nickel and cobalt.

5. The process of claim 1 wherein the temperature in the guard-bed is maintained at about 550 degrees F or higher.

6. The process of claim 5 wherein the temperature in the guard-bed is maintained at about 600 degrees F or higher.

7. The process of claim 6 wherein the temperature in the guard-bed is maintained at about 650 degrees F or higher.

8. The process of claim 1 wherein the LHSV in the guard-bed is about 1 or greater.

9. The process of claim 1 wherein the particulates are removed in the first particulate removal zone by filtration.

10. The process of claim 1 wherein the particulates are removed in the first particulate removal zone by centrifugation.

11. The process of claim 1 wherein in the second particulate removal zone the aluminum-containing particles having an effective diameter of 1 micron or greater are removed by filtration.

12. The process of claim 1 wherein in the second particulate removal zone the aluminum-containing particles having an effective diameter of 1 micron or greater are removed by centrifugation.

13. The process of claim 1 wherein in the second particulate removal zone the particulates are removed by distilling the feed stream mixture recovered in step (d) into the Fischer-Tropsch product of step (e) and a bottoms fraction which contains the aluminum-containing particulates.

14. The process of claim 1 wherein the Fischer-Tropsch product recovered in step (e) contains less than about 2 ppm total aluminum.

15. The process of claim 1 wherein the Fischer-Tropsch product recovered in step (e) contains less than about 1 ppm total aluminum.

16. The process of claim 1 wherein the substantially particulate free Fischer-Tropsch feed stream collected in step (b) contains less than 0.1 weight percent particulates having an effective diameter of greater than 1 micron.

17. The process of claim 1 wherein the Fischer-Tropsch feed stream of step (b) comprises Fischer-Tropsch wax.

18. The process of claim 1 wherein the Fischer-Tropsch feed stream of step (b) comprises condensate and Fischer-Tropsch wax.

19. The process of claim 1 wherein the products of the Fischer-Tropsch synthesis are produced in a slurry-type Fischer-Tropsch reactor.

20. The process of claim 1 wherein the guard-bed is operated as an up-flow fixed bed.

21. The process of claim 1 wherein the guard-bed is operated as an ebullating bed.

22. A process for removing contaminants from the products of a Fischer-Tropsch synthesis reaction, said contaminants comprising (i) particulates having an effective diameter of greater than 1 micron and (ii) at least 5 ppm of aluminum in aluminum-containing contaminants having an effective diameter of less than 1 micron, said process comprising the steps of:

(a) separating the Fischer-Tropsch products into a wax fraction and a condensate fraction;

(b) passing the wax fraction through a first particulate removal zone capable of removing particulates having an effective diameter of greater than 1 micron;

(c) collecting from the first particulate removal zone a substantially particulate free Fischer-Tropsch wax stream containing 5 ppm or more of aluminum in aluminum containing-contaminants having an effective diameter of less than about 1 micron;

(d) contacting the substantially particulate free Fischer-Tropsch wax stream in up-flow mode with an aluminum active catalyst in the presence of hydrogen in a fixed guard-bed at a temperature of at least 600 degrees F and a LHSV of about 1.0 or higher, whereby a mixture is formed which comprises aluminum-containing particles having an effective diameter of more than 1 micron in a Fischer-Tropsch waxy hydrocarbon continuous phase;

(e) passing the mixture through a second particulate removal zone capable of removing substantially all of the aluminum-containing particles formed in step (d); and

(f) recovering from the second particulate removal zone a Fischer-Tropsch product containing 1 ppm or less of total aluminum.